



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Diyun Huang et al.                      Art Unit : Unknown  
Serial No. : 10/625,371                              Examiner : Unknown  
Filed : July 23, 2003  
Title : POLYMERS HAVING PENDANT NONLINEAR OPTICAL CHROMOPHORES  
AND ELECTRO-OPTIC DEVICES THEREFROM

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL

The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (3 pages);
3. Copies of Cited References; and
4. Return Postcard.

Please date stamp and mail the enclosed postcards.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 1/15/04


  
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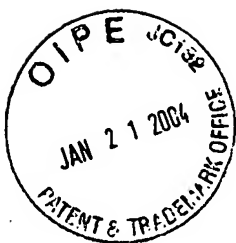
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INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

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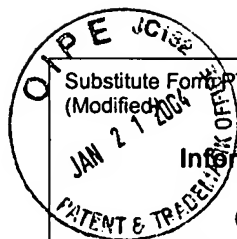
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Substituted Form PTO-1449 (Modified) 	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 14414-010001	Application No. 10/625,371
	<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)			
	Applicant Diyun Huang et al.		Filing Date July 23, 2003	Group Art Unit

## U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,028,702	06/07/1977	Levine			
	AB	4,258,386	03/24/1981	Cheung			
	AC	5,041,516	08/20/1991	Frechet et al.			
	AD	5,051,754	09/24/1991	Newberg			
	AE	5,198,513	03/30/1993	Clement et al.			
	AF	5,207,952	05/04/1993	Griffin, III			
	AG	5,223,356	06/29/1993	Kumar et al.			
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	AL	5,433,895	07/18/1995	Jeng et al.			
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	AZ	6,130,339	10/10/2000	Tan et al.			
	AAA	6,197,921	03/06/2001	Tan et al.			

Examiner Signature	Date Considered
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(Modified 1/1/2004)U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
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10/625,371**Information Disclosure Statement  
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(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant  
Diyun Huang et al.Filing Date  
July 23, 2003

Group Art Unit

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	ABB	6,228,977	05/08/2001	Kanitz et al.			
	ACC	6,294,573	09/25/2001	Curtin et al.			

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	ADD	4401911	08/03/1995	DE				
	AEE	4416476	11/16/1995	DE				
	AFF	19532828	03/21/1996	DE				
	AGG	0414185	02/27/1991	EP				
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	AJJ	0754709	01/22/1997	EP				
	AKK	08108624	04/30/1996	JP				
	ALL	2000089268	03/31/2000	JP				
	AMM	2001085713	03/30/2001	JP				

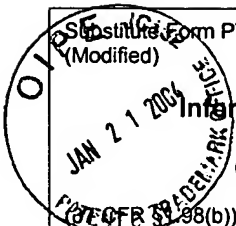
**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	ANN	March, "Classification of Reactions by Type of Compound Synthesized", <u>Advanced Organic Chemistry Reactions, Mechanisms, and Structure</u> , 1992, 4 <sup>th</sup> Edition, John Wiley & Sons, New York, pp. 1269-1300.
	AOO	Chen et al., "Thermosetting Polyurethanes with Stable and Large Second-Order Optical Nonlinearity", <u>Macromolecules</u> , 1992, 25(15):4032-4035.
	APP	Gorman et al., "An Investigation of the Interrelationships Between Linear and Nonlinear Polarizabilities and Bond-Length Alternation in Conjugated Organic Molecules", <u>Proc. Natl. Acad. Sci. USA</u> , 1993, 90(23):11297-11301.
	AQQ	Smith et al., "Perfluorocyclobutane Aromatic Polyethers. Synthesis and Characterization of New Siloxane-Containing Fluoropolymers", <u>Macromolecules</u> , 1996, 29(3):852-860.
	ARR	Kojima et al., "Facile Synthesis of Thiophene Derivatives Using a Cyclopropenyl Cation", <u>Synthesis</u> , 1996, 10:1193-1195.
	ASS	Landmesser et al. "Regiocontrolled C-8 Acylation of Castanospermine", <u>Synthetic Comm.</u> , 1996, 26(11):2213-2221.

Examiner Signature

Date Considered

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**Other Documents (include Author, Title, Date, and Place of Publication)**

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	ATT	Mao et al., "Progress Toward Device-Quality Second-Order Nonlinear Optical Materials. 1. Influence of Composition and Processing Conditions on Nonlinearity, Temporal Stability, and Optical Loss", <u>Chem. Mater.</u> , 1998, 10(1):146-155.
	AUU	Reinhart et al., "Highly Active Two-Photon Dyes: Design, Synthesis, and Characterization Toward Application", <u>Chem. Mater.</u> , 1998, 10:1863-1874.
	AVV	Bosman et al., "About Dendrimers: Structure, Physical Properties, and Applications", <u>Chem. Rev.</u> , 1999, 9(7):1665-1688.
	AWW	Ma et al., "A Convenient Modular Approach of Functionalizing Aromatic Polyquinolines for Electrooptic Devices", <u>Chem. Mater.</u> , 1999, 11(8): 2218-2225
	AXX	Kim et al., "Nonlinear Optical Chromophores Containing Dithienothiophene as a New Type of Electron Relay", <u>J. Mater. Chem.</u> , 1999, 9:2227-2232.
	AYY	Ma et al., "A Novel Class of High-Performance Perfluorocyclobutane-Containing Polymers for Second-Order Nonlinear Optics", <u>Chem. Mater.</u> , 2000, 12(5):1187-1189.
	AZZ	Ma et al., "Highly Efficient and Thermally Stable Nonlinear Optical Dendrimer for Electrooptics", <u>J. Am. Chem. Soc.</u> , 2001, 123(5):986-987.
	AAAA	Raimundo et al. "Push-Pull Chromophores Based on 2,2'-Bi(3,4-ethylenedioxythiophene) (BEDOT) $\pi$ -Conjugating Spacer" <u>Tetrahedron Letters</u> , 2001, 42:1507-1510.
	ABBB	Luo et al., "Design, Synthesis, and Properties of Highly Efficient Side-Chain Dendronized Nonlinear Optical Polymers for Electro-Optics", <u>Adv. Mater.</u> , 2002, 14(23):1763-1768.
	ACCC	Liu et al., "Focused Microwave-Assisted Synthesis of 2,5-Dihydrofuran Derivatives as Electron Acceptors for Highly Efficient Nonlinear Optical Chromophores", <u>Adv. Mater.</u> , 2003, 15(7-8):603-607.

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